Amendments to the Specification:

Please amend the specification as follows:

Please replace paragraph 0064, with the following rewritten paragraph:

Namely, if relatively large irregularities occur to the surface 53 of the phosphor layer 52, the light emitted at the phosphor layer 52 scatters when incident on the photoelectric conversion film 20, and definition of the X-ray image is lowered. Scattering of light by the surface 53 of the phosphor layer 52 becomes the factor of lowering sensitivity. Further, part of the light emitted at the phosphor layer 52 is reflected at the [[he]] surface of the photoelectric conversion film 20. When relatively large irregularities occur to the surface 53 of the phosphor layer 52, the reflected light is diffused on the surface 53 of the phosphor layer 52. This also becomes the factor of lowering definition and sensitivity.